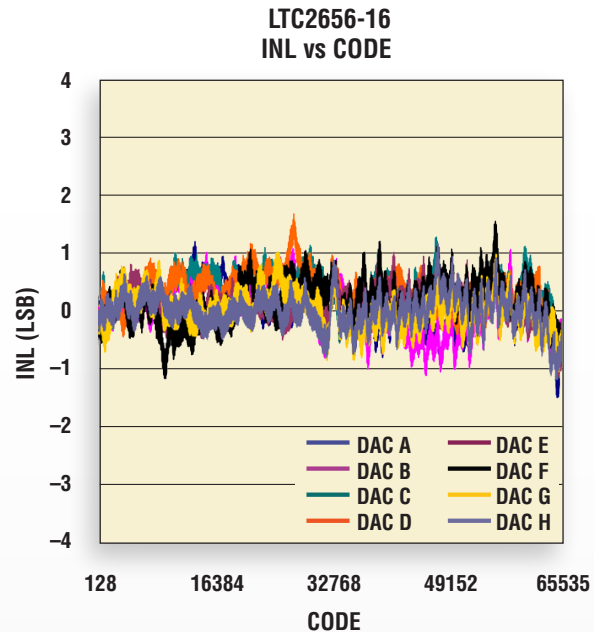
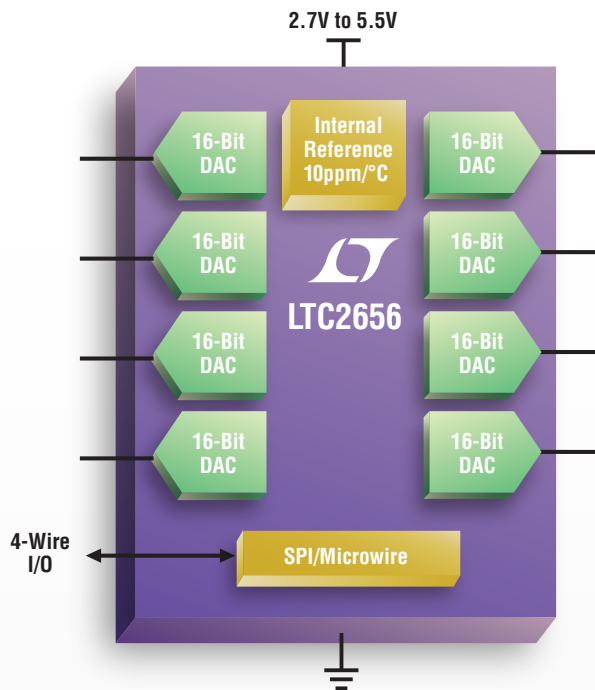


Voltage Output DACs



16-Bit Octal DAC with 10ppm/°C (Max) Internal Reference

The 16-bit LTC[®]2656 combines eight voltage output DACs with guaranteed ± 4 LSB INL and ± 1 LSB DNL, and achieves ultralow AC and DC crosstalk to ensure rock-solid control in precision multichannel open or closed loop systems. The complete family of quad and octal DACs integrates a precision 1.25V or 2.048V reference that achieves 2ppm/°C typical and 10ppm/°C maximum temperature coefficient. The ± 4 LSB (max) INL, ± 2 mV (max) offset error and $\pm 0.1\%$ (max) gain error DC specifications ensure you're designing with the industry's best unipolar DACs.

Features

- Internal Precision Reference: 1.25V or 2.048V, 2ppm/°C (Typ), 10ppm/°C (Max)
- Maximum INL Error: ± 4 LSB at 16 Bits
- 2.7V to 5.5V Supply Range
- Ultralow Crosstalk Between DACs (< 1 nV•s)
- 40°C to 85°C Temperature Range
- Power-on Reset to Zero-Scale or Mid-Scale
- SPI or I²C Interfaces

Applications

- Mobile Communications
- Process Control and Industrial Automation
- Instrumentation
- Automatic Test Equipment
- Automotive

	Quad SPI	Quad I ² C	Octal SPI	Octal I ² C
16-Bit	2654-16	2655-16	2656-16	2657-16
12-Bit	2654-12	2655-12	2656-12	2657-12
Package	4mm x 4mm QFN-20 Narrow SSOP-16	4mm x 4mm QFN-20 Narrow SSOP-16	4mm x 5mm QFN-20 TSSOP-20	4mm x 5mm QFN-20 TSSOP-20



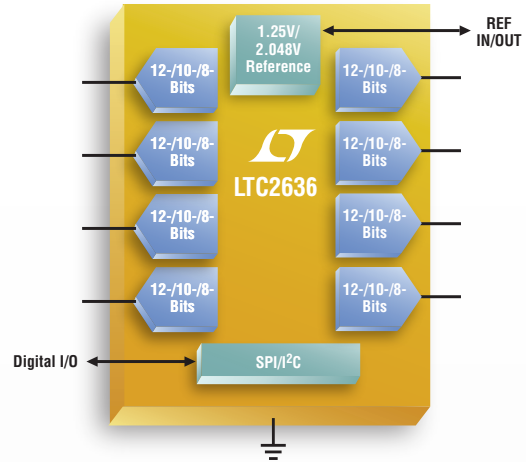
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Tiny 12-Bit Octal DAC with 10ppm/°C Internal Reference

The LTC®2636 DAC family includes singles, duals, quads and octals with ordering options for 12-/10-/8-bit resolution, internal 2.5V or 4.096V, 10ppm/°C typical reference, SPI or I²C interface, power-on reset to zero- or mid-scale, and commercial, industrial or automotive guaranteed temperature specifications. The smallest solution available on the market today, these DACs are ideal for industrial, optical networking and automotive applications.

Features

- Internal Precision Reference:
 - 2.5V Full-Scale, 10ppm/°C (LTC2636-L)
 - 4.096V Full-Scale, 10ppm/°C (LTC2636-H)
- 2.7V to 5.5V Supply Range
- ±2.5LSB (Max) INL, ±1LSB (Max) DNL
- ±5mV Offset Error, ±0.8%FS Gain Error
- Ultralow Crosstalk Between DACs
- Low Noise: 0.75mV_{p-p} 0.1Hz to 200kHz
- Power-on Reset to Zero-Scale or Mid-Scale
- Double-Buffered Data Latches
- Guaranteed Operation Over -40°C to 125°C



	Single			Dual		Quad		Octal	
	SPI	SPI (External Ref)	I²C	SPI	I²C	SPI	I²C	SPI	I²C
12-Bit	2630-12	2640-12	2631-12	2632-12	2633-12	2634-12	2635-12	2636-12	2637-12
10-Bit	2630-10	2640-10	2631-10	2632-10	2633-10	2634-10	2635-10	2636-10	2637-10
8-Bit	2630-8	2640-8	2631-8	2632-8	2633-8	2634-8	2635-8	2636-8	2637-8
Package	SC70-6	TSOT 23-8	TSOT 23-8	TSOT 23-8	TSOT 23-8	3 × 3 QFN-16 MSOP-10	3 × 3 QFN-16 MSOP-10	4 × 3 DFN-14 MSOP-16	4 × 3 DFN-14 MSOP-16

Low Glitch 16-Bit Unbuffered V_{OUT} DAC

The unipolar LTC®2641 and bipolar LTC®2642 are a family of unbuffered 16-/14-/12-bit V_{OUT} DACs. They are low power, fast settling and extremely low glitch DACs that are ideal for AC applications such as waveform generation. With their low offset and drift specifications, the LTC2641/LTC2642 can be used in precision DC positioning systems, gain and offset adjustment applications, ATE and data acquisition systems.

Features

- Low 0.5nV•s Glitch Impulse
- Low 120µA Supply Current
- Fast 1µs Settling Time to 16 Bits
- ±1LSB (Max) INL at 16 Bits, Guaranteed Monotonic
- 2.7V to 5.5V Single Supply Operation
- Power-on Reset Zero-Scale (LTC2641)/Mid-Scale (LTC2642)
- Unbuffered Voltage Output Directly Drives 60k Loads
- 50MHz SPI Compatible Interface

	Single SPI Unipolar	Single SPI Bipolar
16-Bit	2641-16	2642-16
14-Bit	2641-14	2642-14
12-Bit	2641-12	2642-12
Package	3 × 3 DFN-8 SO-8, MSOP-8	3 × 3 DFN-10 MSOP-10

Mid-Scale Glitch Impulse

